

Date: Sat, 24 Sep 94 04:30:13 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #319
To: Ham-Ant

Ham-Ant Digest Sat, 24 Sep 94 Volume 94 : Issue 319

Today's Topics:

2m/70cm 'plexer
AA5UO questions ref CATV cables
Help on good 6M, 2m-70cm Antennas
HF Loop antenna for sailboat??
How to make hole for mobile antenna?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 22 Sep 1994 14:22:56 GMT
From: yuma!galen@purdue.edu
Subject: 2m/70cm 'plexer
To: ham-ant@ucsd.edu

Date: 23 Sep 94 16:45:50 GMT
From: news-mail-gateway@ucsd.edu
Subject: AA5UO questions ref CATV cables
To: ham-ant@ucsd.edu

ref article id AA25600; Fri, 23 Sep 94 08:39:15 CDT
Message-Id: <199409231130.EAA26229@ucsd.edu>
: Ham-Ant Digest V94 #318
Kris, AA5UO said-

> I've obtained a quantity of CATV coax cable that I'd like to use
> for feedline runs out to a future tower/antenna. Can someone help
> me identify this cable. I have some from two manufacturers. They
> are marked as follows:

> TFC T10 K CATV
> and
> 1994 COMMSCOPE INC (no other markings other than foot markers)

> Both are 11/16" o.d. with 1/8" center conductor.
> Both have solid aluminum shield and have foam dielectric.

> Is this "standard" CATV cable? By "standard" I mean is this the 75
> ohm stuff other people are using for ham installations? Any
> precautions I should be aware of? Thanks.

> 73
> Kris AA5UO

Hi Neighbor! You have probably obtained 75 ohm cable as you speculate. The significant measurement would be the ID of the outer jacket which would have to be considered with the dielectric constant of the foam and the od of the center conductor. Absent measurement you are safe in assuming it to be 75 ohm based on the source. I know your biggest problem will be connecting to the cable with a weatherproof joint. The second problem which you will encounter will be that due to the aluminum shield you will have long term electrolysis problems with your connectors unless you find some designed for use in the catv applications. I have some but believe they are all for smaller cable. I tried a quick look for the vendor name in my CD-ROM based vendor catalog data and found nothing. Try Mark Mathews for help. You should be able to buy the connectors locally in Dallas after identifying the rep! I would not mess with the stuff for hf use, but know from a little prior experience that it will pay off for vhf/uhf. Particulay if you run it almost all of the way to your antennas and do not have to rotate the antenna. Call me LL
wk 705-4039/Hm 423-0010

I Opinions expressed are mine alone: Rockwell is not responsible! I
I 73, K5VMU, dale_croft@comsys.rockwell.com I

Date: 23 Sep 1994 13:39:20 GMT
From: news1.hh.ab.com!cle.ab.com!bjp@uunet.uu.net

Subject: Help on good 6M, 2m-70cm Antennas
To: ham-ant@ucsd.edu

What is a manufacturer and model number's with price for the above antennas. If I was to work satellite can a satellite antenna be used for uhf/vhf ssb contests?

Please email at bjp@cle.ab.com!!

73,

Brian N8RPA

Date: Fri, 23 Sep 1994 17:10:25 GMT
From: ihnp4.ucsd.edu!agate!darkstar.UCSC.EDU!news.hal.COM!halsoft.com!netcomsv!davsys.com!irbs.com!jc@network.ucsd.edu
Subject: HF Loop antenna for sailboat??
To: ham-ant@ucsd.edu

I have found that an untuned center fed antenna works very well. Make each leg as long as you can but *equal*. Feed the whole thing with 300 ohm twin-lead or open wire. Haul it up to the spreaders on a flag halyard and take each end forward and aft and tie it off to a cleat or whatever. This antenna is often referred to as a half-size G5RV but it is not.

I used a loop for a while and it worked very well but its a bit unwieldy. Total length was about 120 feet, never measured it. I fed it at a lower forward corner with 300 ohm twin-lead and ran the feed-line in the forward hatch. The loop was the best I have ever had on my boat.

I know a fellow who went all the way with a loop. He lived on the hook so he didn't have neighbors to deal with. The boat was 30ft and he attached fiberglass poles to the top of the mast, the bow, and the stern so that the loop was completely outside of the rigging. Worked great but looked terrible!

There is really no such animal as the best antenna for a sailboat. Antennas that work well on one boat fail to deliver on another. I have talked to several boats that feed an uninsulated back-stay and use the lifelines for a counterpoise. Other boats have tried this, including me, and it was lousy. You have to try several antennas and pick what works for you. I have yet to hear of anyone that has used an untuned center-fed antenna hung from the spreaders that did not work well. Of course it can't be used under sail.

I have an insulated back-stay that is fed at the ***top*** with twin-lead. It works much better, for me, than the conventional bottom fed untuned vertical. Others have tried this scheme and were not satisfied.

The Waterway Cruising Club net meets very day at 0745 Eastern time on 7268. Skip is rather long right now so you should be able to hear a lot of the boats here in South Florida and the Bahamas. I am not sure where in Canada you are though.

John Capo KN4MX

Date: 22 Sep 1994 12:01:31 -0700
From: ucsnews!sol.ctr.columbia.edu!news.kei.com!yeshua.marcam.com!
zip.eecs.umich.edu!newsxfer.itd.umich.edu!gatech!howland.reston.ans.net!agate!
barrnet.net!nntp.crl.com!crl4.@@ihnp4.ucsd.edu
Subject: How to make hole for mobile antenna?
To: ham-ant@ucsd.edu

Riyadth Al-Kazily (riyadth@boi.hp.com) wrote:
: Hello,

: Having recently bought a new Nissan Pathfinder, and a Yaesu FT-5100
: to put in it, I now have the pleasant task of drilling a hole to place
: the antenna on the roof. However, my Larsen NMO-K mount says I need a
: 3/4" hole, and my largest drill bit is 1/2". I have hole saws available,
: but they are toothed for wood, and I don't want to try that out on my new
: car.

: What I need is a suggestion for making the hole large enough. Are
: there special drill bits available for this task, or do I need some kind
: of sheet-metal punch only available at a radio installer's shop? Any
: suggestions would be helpful.

They actuall make a special drill bit for mounting the NMO antenna mount. Check with the local Motorola MSO they should have one. You might be able to get them to pop the hole in the roof. Other wise use a 3/4" chassis punch or pick up a "Unibit" these are available in a 3/8" shaft. They start at about 1/4" diamater and progress in steps to 3/4"

Ron
N5HYH

Date: 22 Sep 1994 19:00:26 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!ceylon!
news2.near.net!usenet.elf.com!rpi!marcus.its.rpi.edu!lascal@network.ucsd.edu
To: ham-ant@ucsd.edu

References <35s400\$2pgu@yuma.ACNS.ColoState.EDU>, <35s7i6\$8v@usenet.rpi.edu>, <35sf3g\$128a@yuma.ACNS.ColoState.EDU>.net
Subject : Re: 2m/70cm 'plexer (DU and DI)

Galen Watts (galen@picea.CFNR.ColoState.EDU) wrote:

: I looked it up (ARRL Handbook,1987): 'A duplexer is a device that allows the
: repeater transmitter and receiver to be connected to the same antenna.
: ...a duplexer will allow the signal from the antenna to reach the receiver
: while blocking energy from the transmitter.'

: The diagram I posted will (and does) work as a 2m/440 DUplexer. It will
: not work as a 2m duplexer, nor will it work as a 440 duplexer.

: DIPLEX: (Webster's Ninth) 'Relating to or being simultaneous transmission
: or reception of two radio signals using a common feature (as a single carrier
: or single antenna)'
: (quoted as written, even though I think it's oddly worded)

: It does that (2m/440 DIplexer), too.

Not to sound like a pyrotechnician, but I've never seen a dual band repeater that was not symmetrical in the sense that it was 2 repeaters that did not both transmit and receive at the same time. A link might do that, but why would a repeater? I could go on at length what would be annoying and problematic with this.

Like I said... I was interested in clearing up the terminology. I'm not sure what point has been made.

as a reminder, here is one of the early requests:

>Please put me on the list of recipients for duplexer construction mail! I am
>interested in 2M and 70cm duplexers, but I have not found sufficient design
>and construction articles.

My interpretation of this, since 2 bands are mentioned and duplexers is plural, is that the interest is in duplexer design.

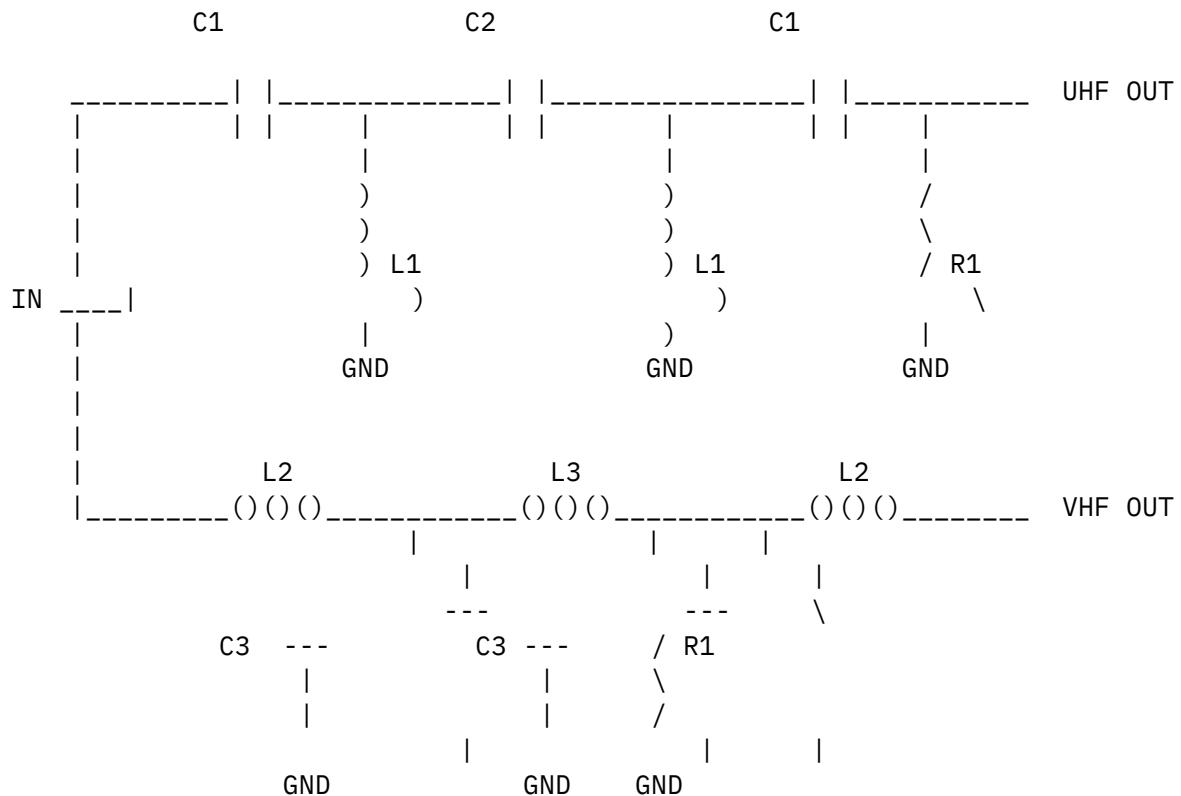
-Lance, go ahead.... flame away

--

Lance Lascari WS2B <lascal@rpi.edu> Senior EE @ Rensselaer Polytechnic Inst.
Mount Greylock Expeditionairy Farce Secret agent #52,342

Date: (null)

From: (null)



Where:

C1: 4.8 pF

C2: 3.3 pF

C3: 15 pF

L1: 2 turns #14, 3/16" dia.

L2: 4 turns #14, 3/16" dia.

L3: 5 turns #14, 1/4" dia.

R1: 50k, 1/2 w.

I built mine over a solid pc board and wound both L2's and L3 from one piece of wire. I built up the caps from three to four cer disc caps each, I used four for C1 in parallel.

73, Galen, KF0YJ

Date: Thu, 22 Sep 1994 19:41:31 GMT
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!swrinde!
sgiblab!pacbell.com!uop!csus.edu!netcom.com!n4zr@network.ucsd.edu
To: ham-ant@ucsd.edu

References <fred-mckenzie-0709941813050001@k4di.ksc.nasa.gov>,
<1994Sep10.054916.23094@grian.cps.altadena.ca.us>, <CvxMDJ.Etx@news.Hawaii.Edu>,,
Subject : Re: Please Help: 1/4 wave 2m/70cm Antenna Help

Unless it has a trap in it, of course.

Pete N4ZR

Jeffrey Herman (jeffrey@kahuna.tmc.edu) wrote:
: morris@grian.cps.altadena.ca.us (Mike Morris) writes:

: >A good friend of mine has a 1/4 wave 440/2m antenna on his Chevy S10
: >station wagon.

: Impossible. An antenna can't be 1/4 wave on *both* bands. A 1/4 wave
: on 2M is a 3/4 wave on 440 Mc. [Isn't this obvious?]

: Jeff NH6IL

--
73, Pete
N4ZR@netcom.com
"Better, faster,cheaper -- choose any two"

End of Ham-Ant Digest V94 #319
